AMPHIBIOUS SHIPS, CRAFTS AND VEHICLES

CATF SURGEON COURSE 1999

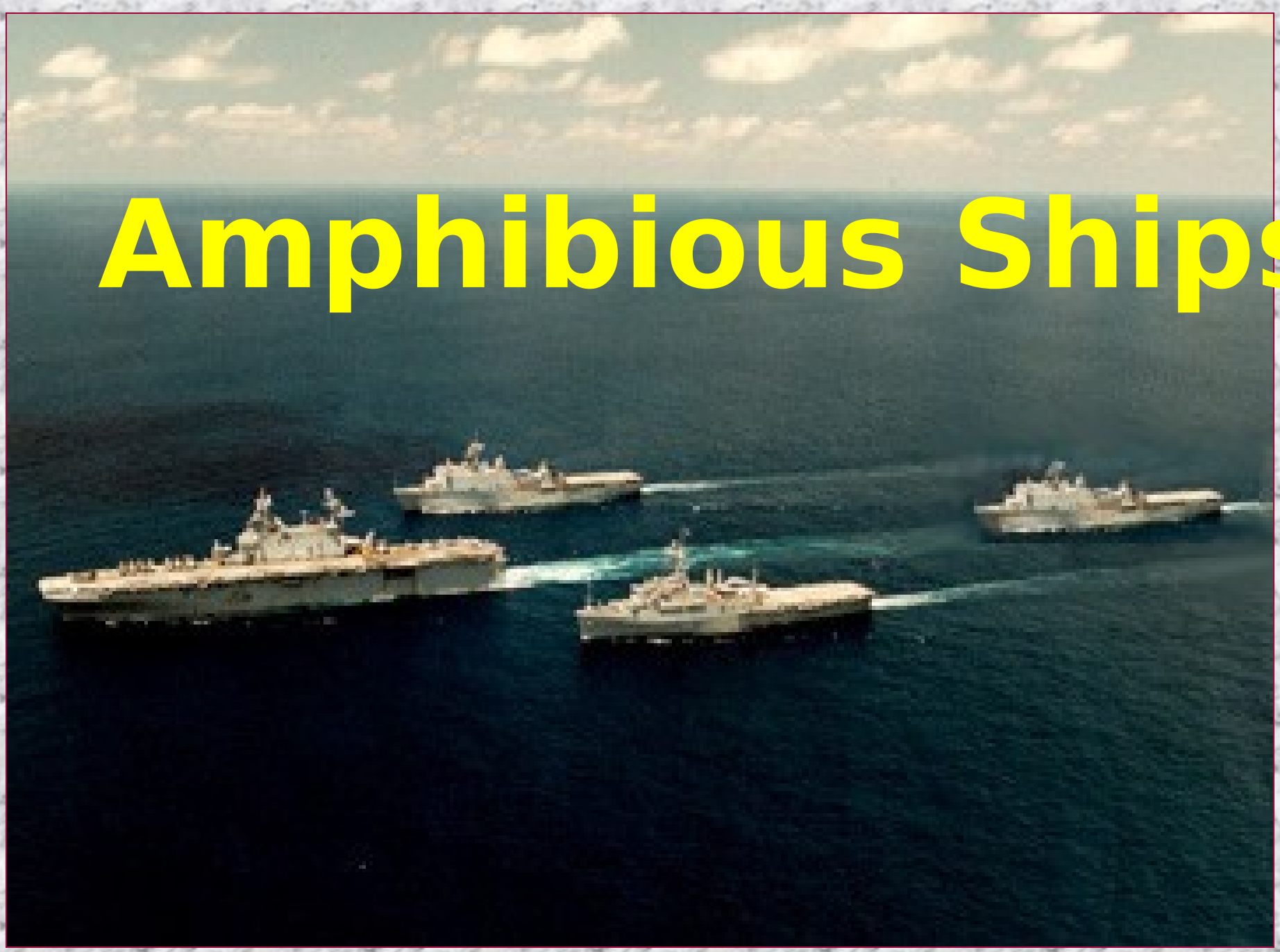
Expeditionary Warfare Training Group, Pacific

Amphibious Ships, Craft, and Vehicles

Learning Objectives

Describe the Mission and Characteristics of:

- Amphibious Ships
- Landing Craft
- Amphibious Vehicles


Amphibious Ships

LCC Amphibious Command Ship

Mission: *C2*

Characteristics:

Length:	620 ft	CATF:	125 off./126 enl
Beam:	108 ft	CLF:	56 off./153 enl
Displ.:	18,500 tons		Troops: 250
Speed:	21 kts	L/C:	3 LCPL
Helo Cap:	1 helo spot		
Well Deck:	None		

Staff:

LCC Amphibious Command Ship

Helo Spot

LCPLs

LCC Amphibious Command Ship

LHA Amphibious Assault Ship (General Purpose)

Mission: *Multi-purpose, assault via helo,landing craft, & amphib vehicle.*

Characteristics:

Length: 820 ft
Beam: 108 ft
Displ.: 40,000 tons
Speed: 24 kts
Crew: 52 off.
740 enl

Notional A/C Load:

12 - CH-46
4 - CH-53
6 - AV-8B
4 - AH-1
3 - UH-1
2 - HH-46
9 - spots
2 - elevators

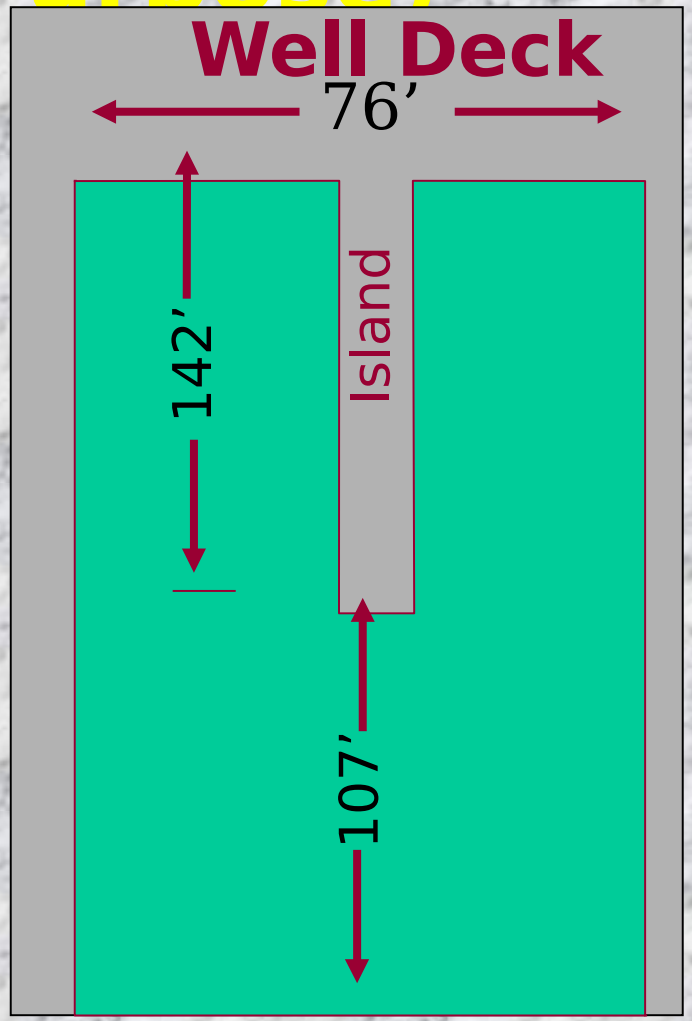
LHA Amphibious Assault Ship (General Purpose)

Well Deck:

LCAC - 1
LCU - 2/4
LCPL - 4

Cargo/Medical

Vehicle - 28,700 sq ft
Cargo - 141,200 cu ft
Troops - 1900
Beds - 300



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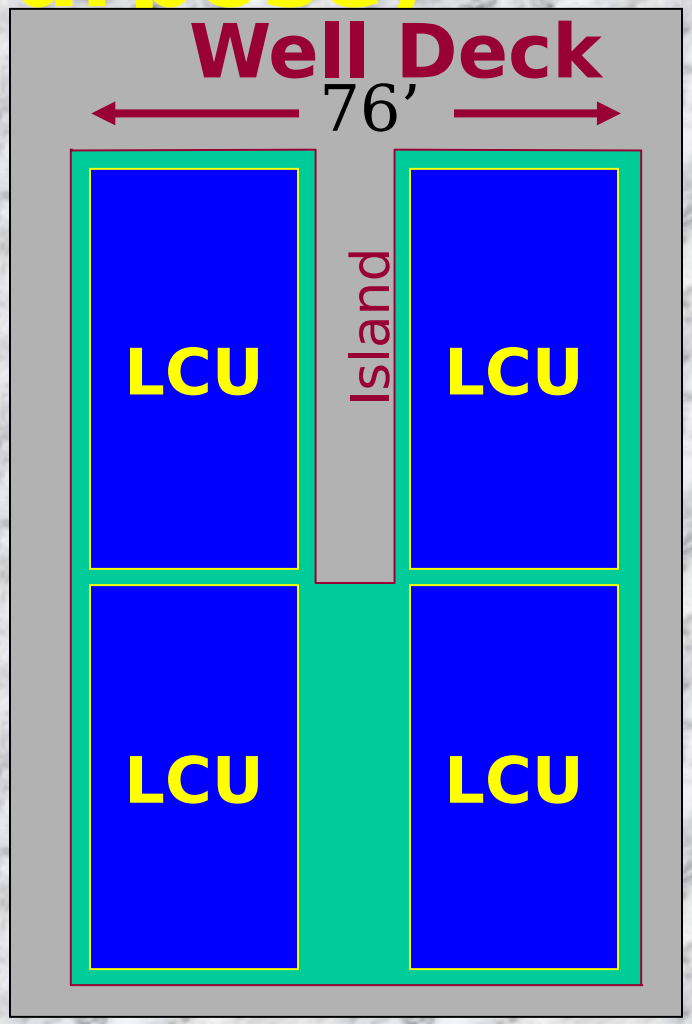

LHA Amphibious Assault Ship (General Purpose)

Well Deck:

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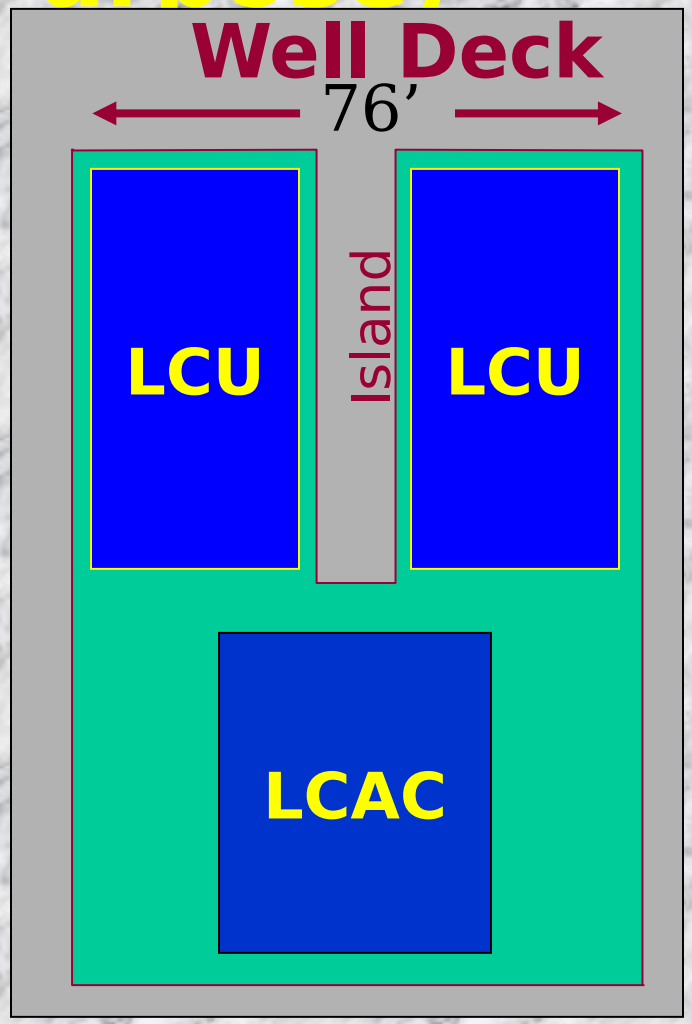

LHA Amphibious Assault Ship (General Purpose)

5” Guns (Removed)

LHA Amphibious Assault Ship (General Purpose)

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LHA Amphibious Assault Ship (General Purpose)

LHD
Amphibious Assault Ship (Multi-Purpose)

Mission: *Multi-purpose, assault via helo,landing craft, & amphib vehicle.*

Characteristics:

Length: 844 ft
Beam: 107 ft
Displ.: 40,500 tons
Speed: 22 kts
Crew: 55 off.
1,140 enl

Notional A/C Load:

12 - CH-46
4 - CH-53
6 - AV-8B
4 - AH-1
3 - UH-1
2 - HH-46
9 - spots
2 - elevators

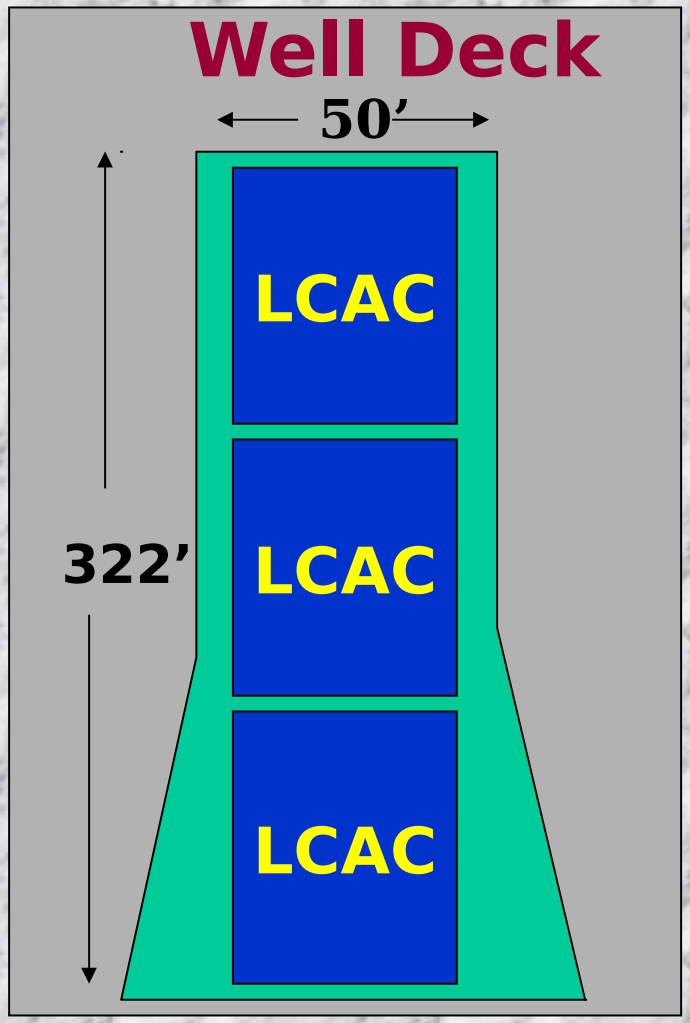
LHD
Amphibious Assault Ship (Multi-Purpose)

Well Deck:

LCAC - 3/0
LCU - 0/2
LCPL - 4

Cargo/Medical

Vehicle - 24,000 sq ft
Cargo - 145,000 cu ft
Troops - 1900
Beds - 600



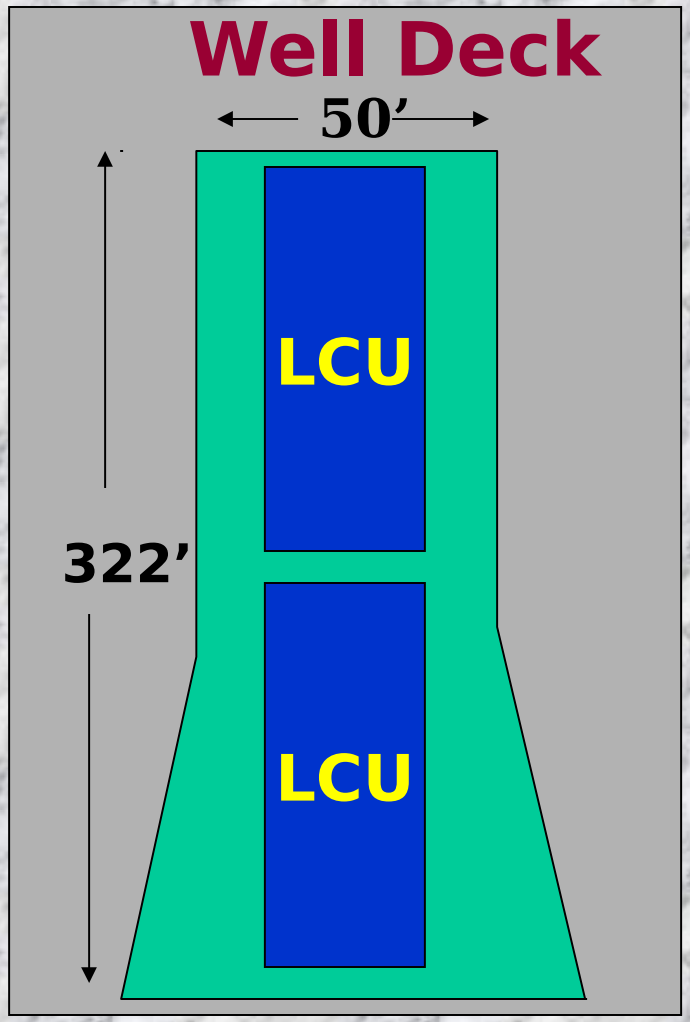
LHD Amphibious Assault Ship (Multi-Purpose)

Well Deck:

LCAC - 3/0
LCU - 0/2
LCPL - 4

Cargo/Medical

Vehicle - 24,000 sq ft
Cargo - 145,000 cu ft
Troops - 1900
Beds - 600



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Amphibious Assault Ship (Multi-Purpose)

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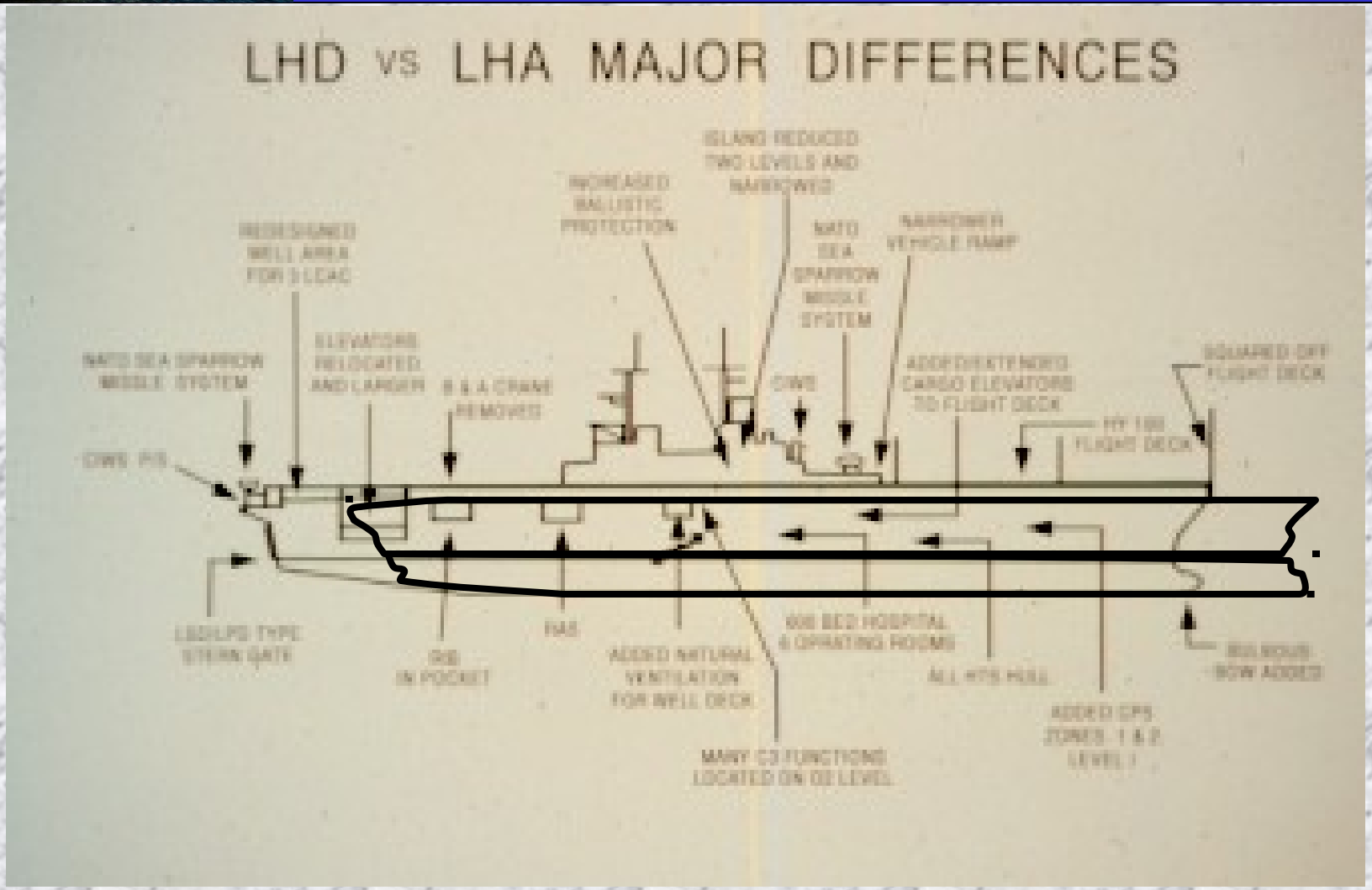
LHD VS LHA MAJOR DIFFERENCES
ISLAND REDUCED TWO LEVELS AND NARROWED
INCREASED BALLISTIC PROTECTION
NATO SEA SPARROW MISSILE SYSTEM
NARROWER VEHICLE RAMP
REDESIGNED WELL AREA FOR 3 LCAC
ELEVATORS RELOCATED AND LARGER
NATO SEA SPARROW MISSILE SYSTEM
8 & A CRANE REMOVED
CIWS
ADDED EXTENDED CARGO ELEVATORS TO FLIGHT DECK
SQUARED OFF FLIGHT DECK
CIWS P/S
HY 100 FLIGHT DECK
LSD/LPD TYPE STERN GATE
QSB IN POCKET
HAS
ADDED NATURAL VENTILATION FOR WELL DECK
600 BED HOSPITAL & OPERATING ROOMS
ALL HTS HOSE
BULBOUS BOW ADDED
MANY C3 FUNCTIONS LOCATED ON 02 LEVEL
ADDED CPS ZONES 1 & 2 (LEVEL)

LPD
Amphibious Transport Dock Ship

Mission: *Transport troops & equipment, land via landing craft, amphib vehicles, or helo.*

Characteristics:

Length: 570 ft
Beam: 84 ft
Displ.: 16,900 tons
Speed: 21 kts
Crew:: 509
Air Hangar
2 spots

Cargo and Well Deck:

Cargo: 51,100 cu ft
Vehicle: 14,000 sq ft
LCPL: 2
LCU: 1/0
LCAC: 0/1
AAV: or 45 AAV
Troops: 900

LPD
Amphibious Transport Dock Ship

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Amphibious Transport Dock Ship

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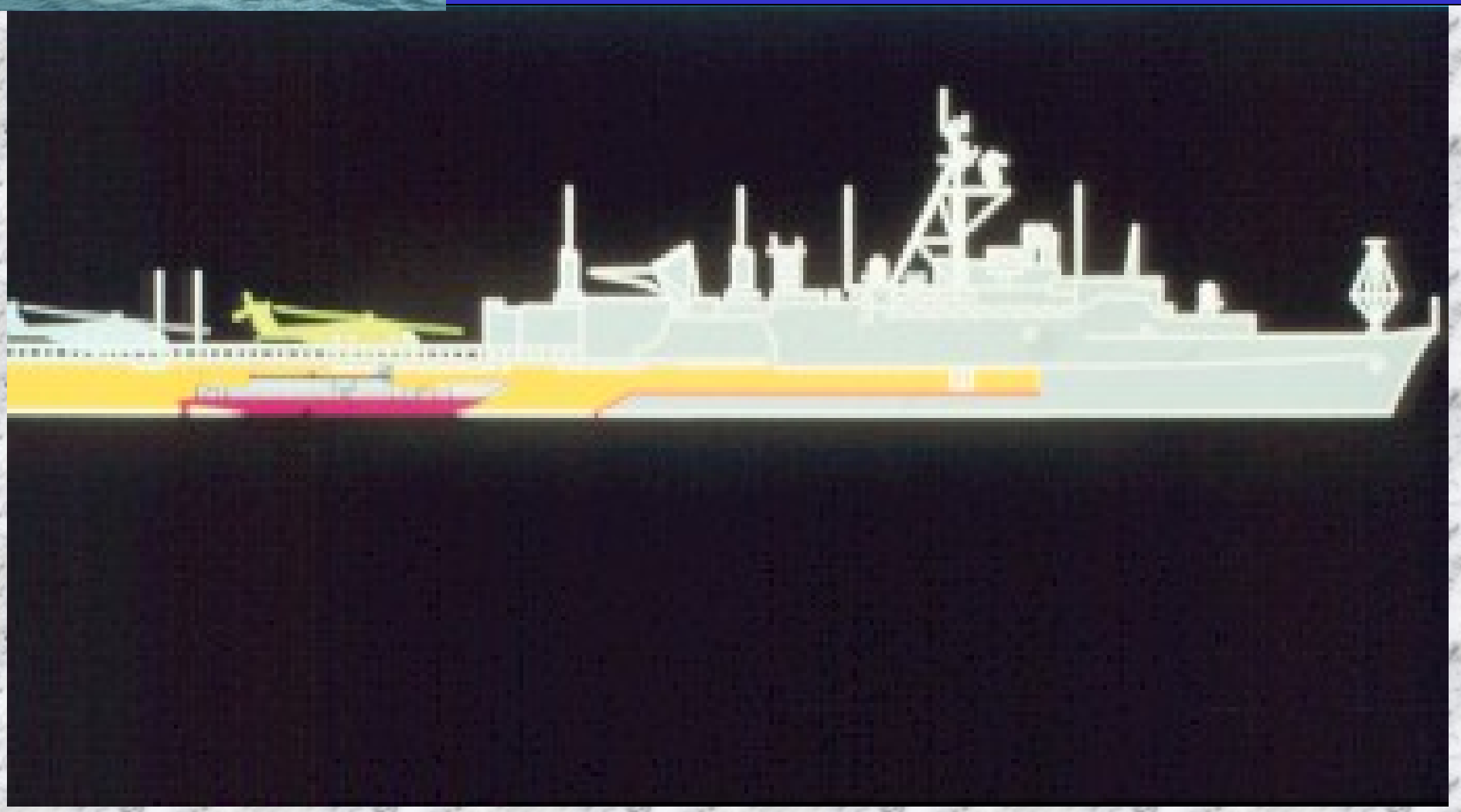
Amphibious Transport Dock Ship

LPD
Amphibious Transport Dock Ship



LSD-36
Dock Landing Ship

Mission: *Transport & launch loaded landing craft, & amphib vehicles. Provide limited docking repair services.*

Characteristics:

Deck:

Length: 562 ft
Beam: 84 ft
Displ.: 13,700 tons
Speed: 22 kts
Crew:: 426
Air 1 spot
Troops: 330

Cargo and Well

Cargo: 1800 cu ft
Vehicle: 19,700 sq ft
(8,800 sq ft w/o)
LCPL: 2
LCU: 0/3(1)
LCAC: 3(2)/0
AAV: or 47 AAV

LSD-36
Dock Landing Ship

LSD-36
Dock Landing Ship

LSD-36
Dock Landing Ship

LSD-41/(49) Dock Landing Ship

Mission: *Transport & launch loaded landing craft, & amphib vehicles. Provide limited docking repair services.*

Characteristics:

Deck:

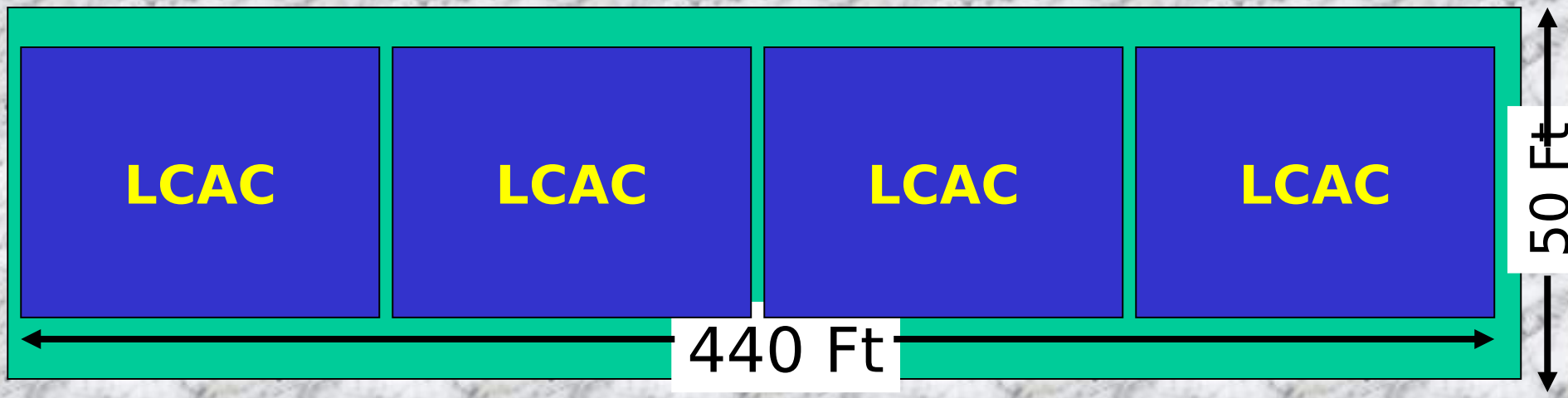
Length: 609 ft
Beam: 84 ft
Displ.: 16,900 tons
Speed: 22 kts
Crew:: 413
Air 2 spots
Troops: 440

Cargo and Well

Cargo: 8,970/(67,600) cu ft
Vehicle: 11,800/(20,200) sq ft
LCPL: 2
LCU: 4(1)/0
LCAC: 0/3(2)
AAV: or 64 AAV

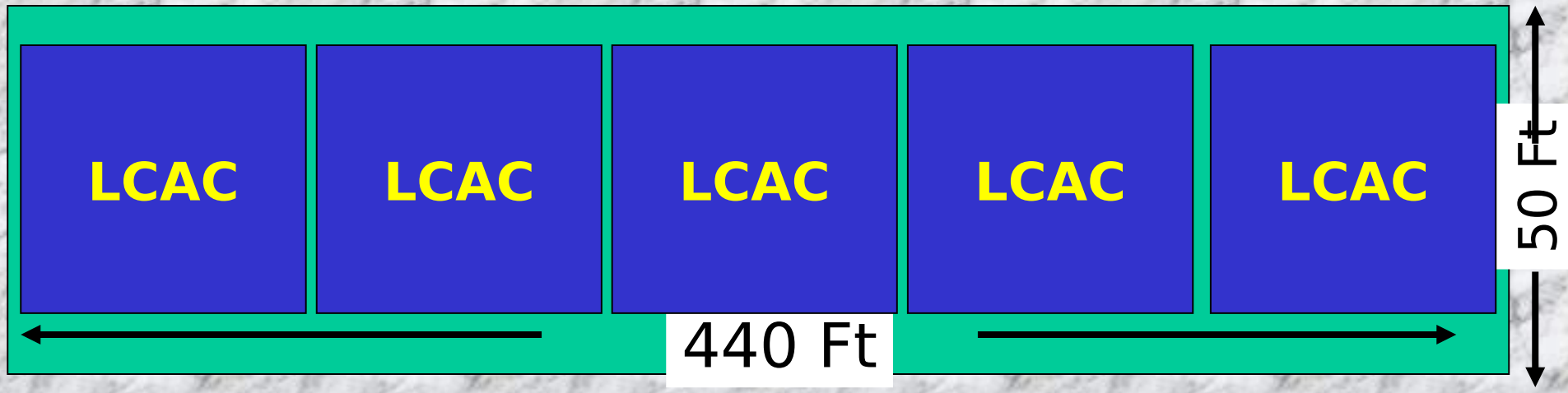
LSD-41/(49)
Dock Landing Ship

Well Deck LSD-41
(LCAC ramps down)



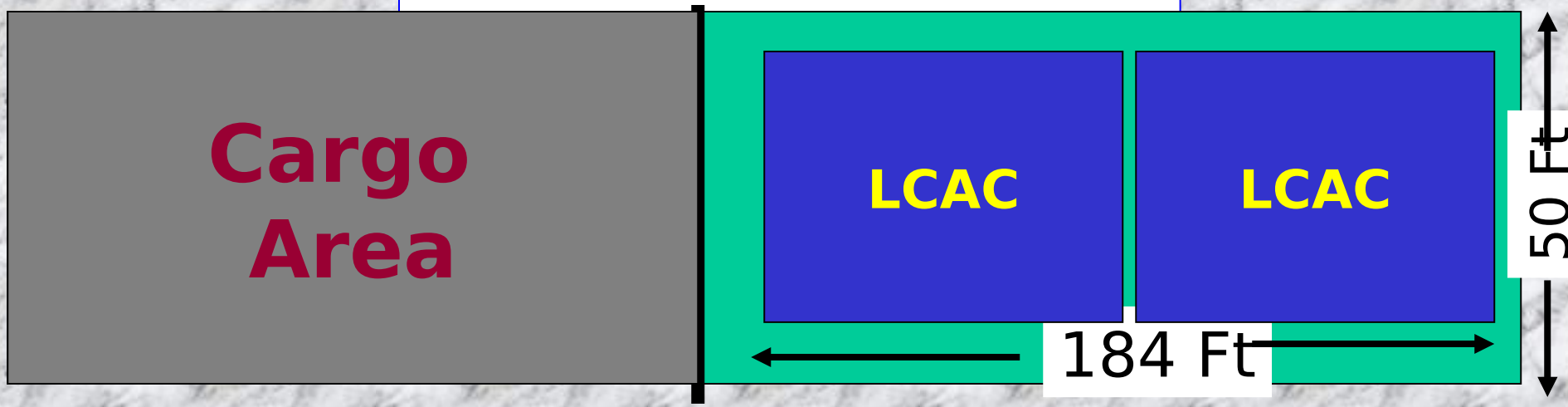
LSD-41/(49)
Dock Landing Ship

Well Deck LSD-41
(LCAC ramps up)



LSD-41/(49)
Dock Landing Ship

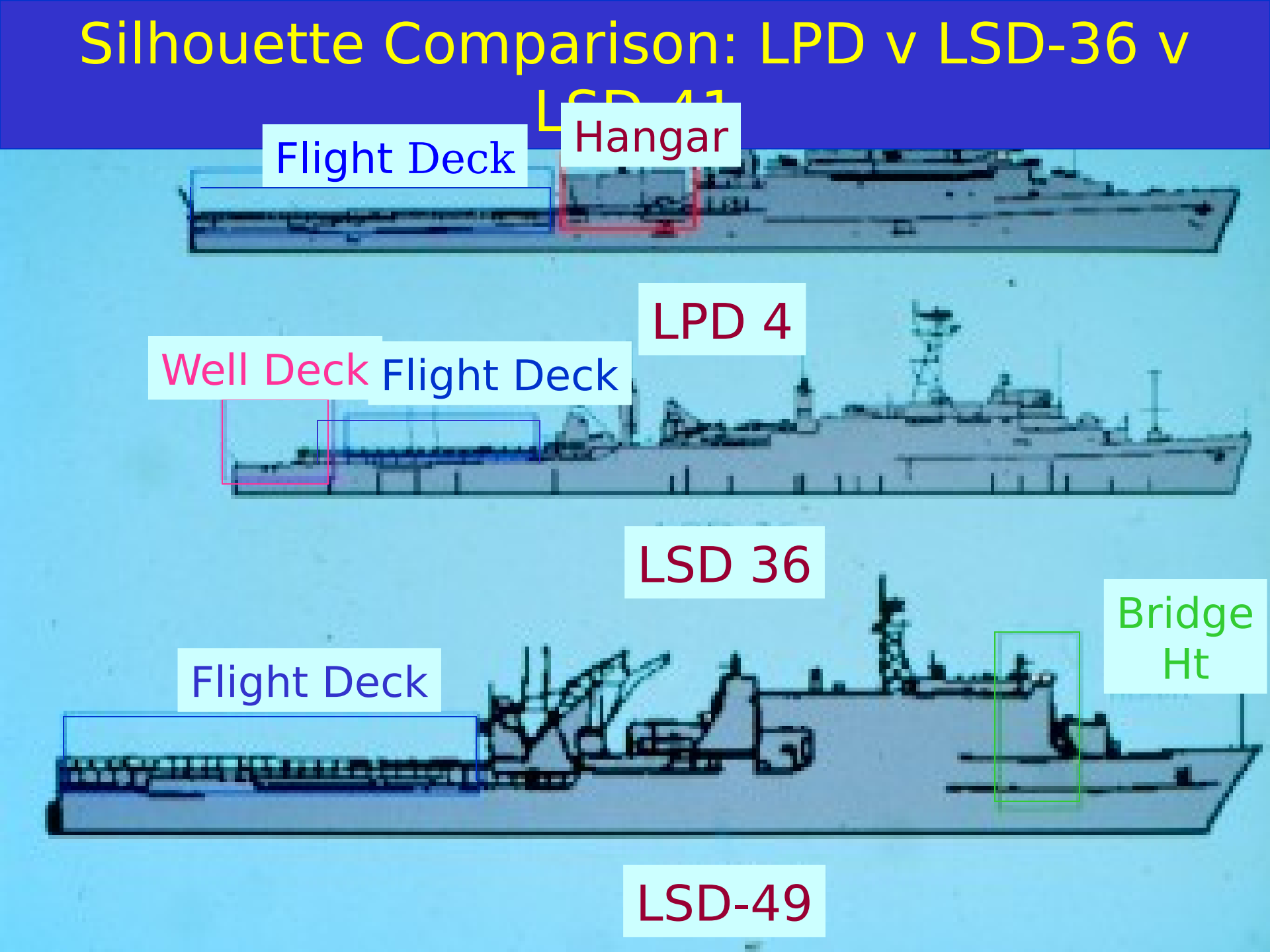
Well Deck
LSD-49



LSD-41/(49)
Dock Landing Ship

LSD-41/(49)
Dock Landing Ship

Silhouette Comparison: LPD v LSD-36 v LSD-41



Landing Crafts
&
Amphibious Vehicles

LCPL
Landing Craft, Personnel, Large

MISSION: Amphibious control work. Light salvage.

Speed: 19-25 kts

Nav:: Magnetic compass

Comms: 1 VHF
(inst) 1 VHF
(port.)

LCM-8
Landing Craft, Mechanized

MISSION: Transport heavy equipment and supplies from ship to shore

Speed: 8-10 kts

Cargo: 60 tons

150 troops

Ramp: Fwd

Endur: 11 hrs

Specs: 74 ’x 21’

LCM-8
Landing Craft, Mechanized

LCU and LCM-8s

LCU
Landing Craft, Utility

MISSION: Transport heavy equipment and supplies from ship to shore

Speed: 10-12 kts

Cargo: 180 tons

400 troops

Cap.: Galley

Berthing

Ramps: Fwd, aft

Endur: 40

LCU
Landing Craft, Utility

LCAC
Landing Craft, Air Cushion

MISSION: Over the horizon transport of heavy equipment, troops, and supplies from ship across the beach

Speed: 45+ kts

Cargo: 60 (75) tons

24 troops

Cap.: 4 ft cushion

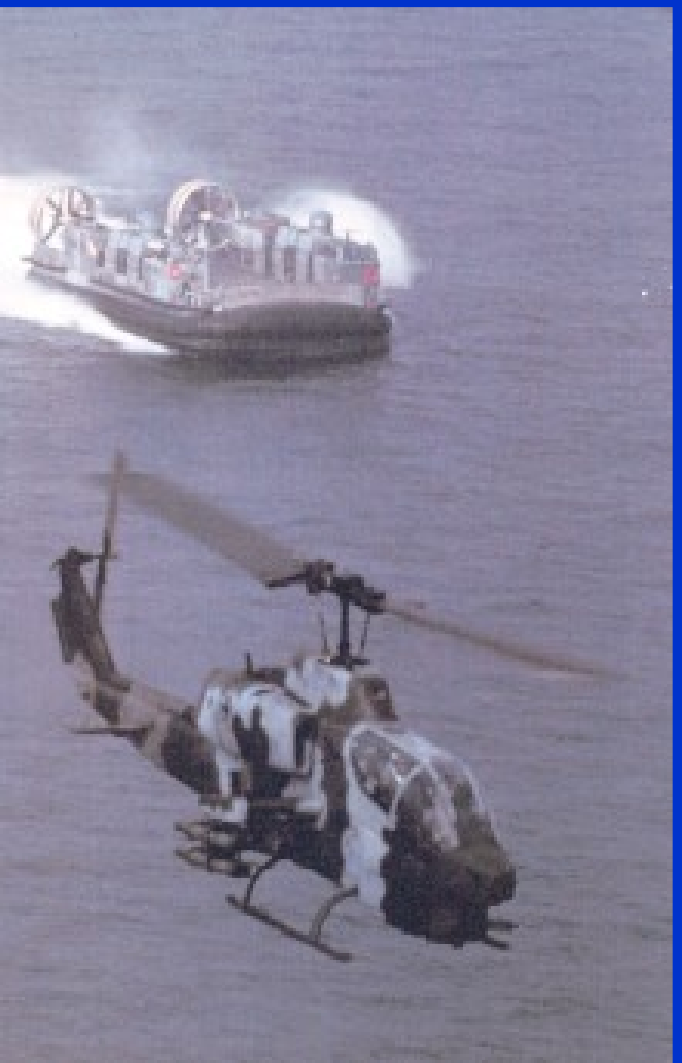
Ramps: Fwd, aft

Endur: 4 hrs

LCAC
Landing Craft, Air Cushion

LCAC
Landing Craft, Air Cushion

LCAC
Landing Craft, Air Cushion



LCAC
Landing Craft, Air Cushion

Ship LCAC capacities:

LHA-1 : 1
LHD-1 : 3
LPD-4 : 1
LSD-36: 2/3
LSD-41: 4
LSD-49: 2

LARC V
Lighter Amphibious Re-supply Cargo

MISSION: Salvage. Suitable to transport beach party, supplies, and cargo from ship to shore.

Wt: 20,900 Lbs

Range

Water: 60 hrs

Land: 200 mi

Dim.: 10’ x 35’

Speed

Water: 9 kts

AAV7PA1 Amphibious Assault Vehicle Personnel

MISSION: Armored tranport for landing forces from ship and across difficult beach and terrain.

Wt: 50,800 Lbs

Range

Water: 7 hrs

Land: 300 mi

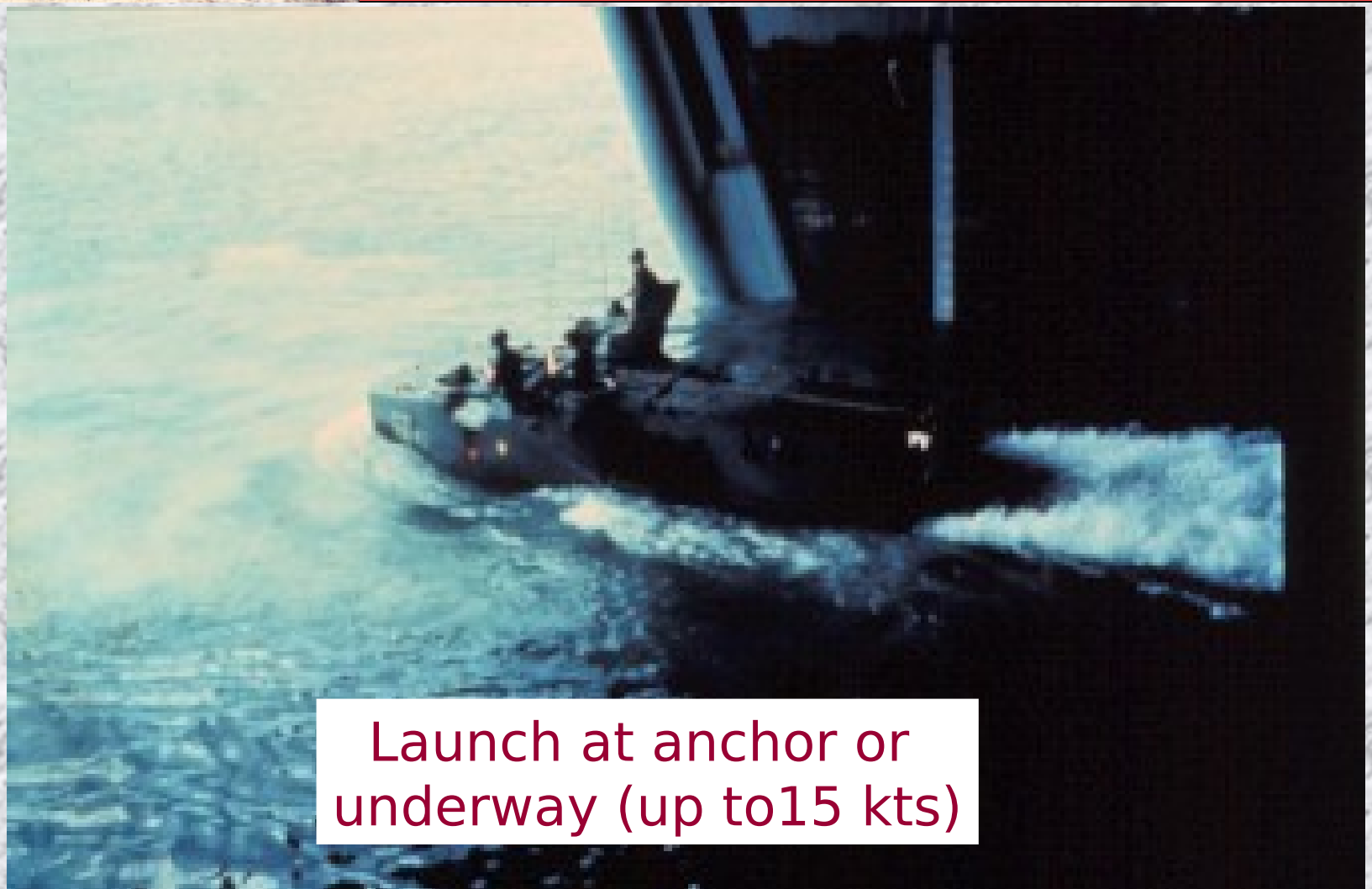
Cargo: 21 Troops or 10,000 lbs

Speed

Water: 6 kts

Land: 20-30 mph

AAV7PA1 Amphibious Assault Vehicle Personnel



Launch at anchor or underway (up to15 kts)

AAV7PA1 Amphibious Assault Vehicle Personnel

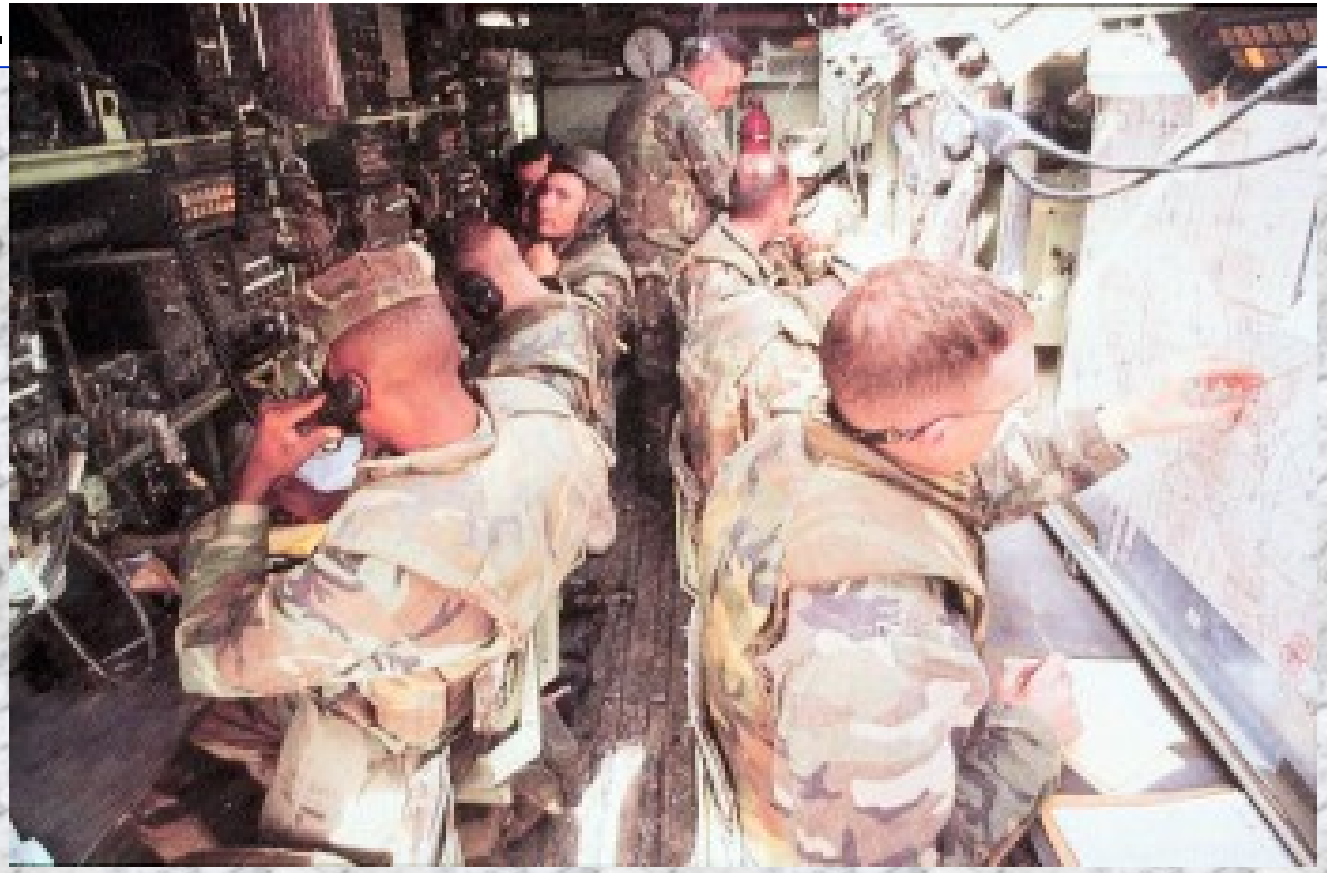
AAV7RA1 Amphibious Assault Vehicle Recovery

MISSION: Recovery and basic maintenance of AAVs.

AAV7RA1 Amphibious Assault Vehicle Recovery

AAV7CA1 Amphibious Assault Vehicle Command

MISSION: Mobile command post for communication with infantry, supporting arms and logistical support elements.



QUESTIONS?

AMPHIBIOUS SHIPS, CRAFTS AND VEHICLES

END OF LECTURE